

NEWSLINE

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Lab armor for Iraq gun trucks

By Stephen Wampler
NEWSLINE STAFF WRITER

WASHINGTON, D.C. — Under funding from the Defense Advanced Research Projects Agency (DARPA) and in collaboration with the U.S. Army, gun truck armor kits developed by Laboratory researchers are now providing convoy protection for American troops on the roads of Iraq.

Livermore researchers have created a modular, easy to assemble armor protection kit that, with the addition of several machine guns, allows the military to convert five-ton supply trucks into gun trucks to protect convoys.

To date, some 31 trucks have been outfitted with the armor protection kits and are being



A gun truck, with an armor kit developed by Laboratory researchers and engineers, was struck by an improvised explosive device on March 23, southwest of Fallujah, Iraq. All seven U.S. soldiers in the vehicle at the time of the attack walked away unharmed.

used in convoys on Iraqi roads, with plans for the assembly of dozens more gun truck kits in

See **TRUCKS**, page 7

Streamlined review and release helps more Laboratory authors use Information Management

By Linda Lucchetti

NEWSLINE STAFF WRITER

Mission accomplished. That's what Business Services (BSD) is saying about the Information Management (IM) system. However, BSD staff are not complacent with the achievement — they want more Lab authors to get on board.

Since it was launched in 2003, and now with nearly two years of service to customers, the online, streamlined system for how the Lab handles the review and release



Information Management

of thousands of unclassified documents — scientific, technical and administrative — written for the scientific community outside the Lab or for the general public, can be termed a success. Just check out the statistics.

With the increase in awareness, the IM system has provided an increase in reviews throughout the Lab. In FY04, IM reviewed 6,801 documents. Already this June, IM has reviewed 6,399 for FY05 documents.

See **IM**, page 7

Ambassador offers ways to translate knowledge into action and policy

By Don Johnston

NEWSLINE STAFF WRITER

For policymakers to address pressing global issues such as climate change, researchers must "play a leadership role" in translating scientific knowledge into policy, Ambassador Gordon Smith of Canada told a Laboratory audience last week.

"It's obvious there is a gap between researchers

and policymakers, a gap that goes both ways. Researchers don't feel that policymakers make use of what researchers do," Smith said in a Director's Distinguished Lecturer Series talk July 15. "Policymakers feel that researchers are adequately plugged into the policy agenda. Policymakers and researchers live in very different cultural environments."

Smith was at LLNL for discussions with Jane

Long, associate director for Energy and Environment, and the Center for Global Security Research (CGSR) focusing on "how do you think about climate change and energy issues in a national security context," said Ron Lehman, CGSR director.

Citing tobacco and smoking as an example,

See **DDL**S, page 5

UC regents extend contract for Lab until Sept. 30, 2007

The University of California Board of Regents agreed Thursday to extend the term of LLNL's current operating contract until Sept. 30, 2007.

The action ratifies a decision by the U.S. Department of Energy in June of last year to extend the Laboratory's contract for at least two years and to conduct separate competitions for the management of LLNL and Los Alamos National Laboratory (LANL). At the time, DOE

See **CONTRACT**, page 8

No structures damaged by Tesla grass fire

Laboratory officials said this week that no structures were damaged and no one was injured, by a 10,000 acre grass fire that strayed onto Site 300, the Lab's experimental test facility located near the San Joaquin-Alameda County border, 15 miles southeast from the main Lab site. Only about 200 acres of Site 300's nearly



See **FIRE**, page 7 This week a large fire scorched the grass near the Lab's Site 300 facility.



New phase dawns
for Aurora

— Page 2



Pioneering
computer graphics

— Page 3



A guided tour
of LLNL's birdland

— Page 8



LAB COMMUNITY NEWS

Weekly Calendar

Technical Meeting Calendar, page 4

Wednesday
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The Benefits Office will present, "**65 and Still Working**," today, from noon to 1 p.m. in Bldg. 571, room 1301.

If you are 65 or are approaching 65 and are still working, come and find out how Medicare coordinates with your UC Health Plan. Space is limited; call Lisa Payne at 3-0950 to register. This presentation will be offered once a quarter. The next presentation is scheduled for Oct. 26.

Up
&
Coming

The next deadline for submitting **graduate and undergraduate academic plans** is Aug. 1. EODD continues to process requests for funding of degree programs on a quarterly basis. Review and approvals are done quarterly, rather than monthly, by the Student Policy Committee. All requests should be sent to the Education Office, L-728. Requesters will be notified following the Student Policy Committee meeting scheduled for the first Thursday of the following month. For additional information, contact the Education Office, 4-5479.

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The next **Lab blood drive** will be Aug. 8-11 in Trailer 4675 (the old central cafeteria). Donors are encouraged to schedule an appointment in advance at <http://www.beadonor.com/> and click on the word "registration." The drive sponsor code is: "LLNL." Individuals without Internet access may schedule an appointment by calling the LLESA Office at 2-9402. The goal of the Red Cross staff is to complete the donation process for pre-scheduled appointments in 60 minutes or less. If your schedule does not allow you to make an appointment, the staff will work you into the schedule, as time permits, after the first hour of each drive day. Donor eligibility questions should be directed to the American Red Cross at 510) 594-5143.

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Volunteers are needed to help plan the 13th Annual **San Joaquin Expanding Your Horizons in Science and Mathematics** conference scheduled for Oct. 1 at the University of the Pacific in Stockton. Volunteers are needed in the following areas: co-chair, finance, fundraising, conference program, workshop presenters, publicity, and media. For more information about the conference or to volunteer go to: <http://education.llnl.gov/eyh/>. For workshop presenter questions, contact Cary Gellner, 2-0643. For all other questions, contact Yuki Ohashi, 294-2393 (yohash@sandia.gov).

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First Biosciences postdoc symposium



The Biosciences Directorate held its first annual postdoc symposium on Wednesday. Award winners were, from second left: Stuart Huntley, Ann Clatworthy, and Richard Law. Al Ramponi, left, and Elbert Branscomb, right, officiated. Inset: Clatworthy is congratulated by Ramponi for best oral presentation; Huntley and Law were honored for best poster presentations. All three received \$3,000 travel awards to attend professional meetings.

Last day for input to Aurora's future vision

The Web portal for employee input to the Aurora Project will be shut down today (July 22) in preparation for next week's two-day offsite by the five Aurora teams.

The teams are developing initiatives that will strategically position the Lab for the year 2025. Team members will discuss the details during a special offsite July 26 and 28. During that time Aurora team members will introduce ideas for expanded areas of scientific and technological research, new partnerships,

improved infrastructure and much more.

A special portal, located on "MyLLNL," was opened to provide updates and a way for employees to comment on ideas proposed by the five teams: Missions & Sponsors; Science & Technology; Operations & Infrastructure; Partnerships & Relationships; or Workforce & Work Environment.

See the Aurora Website at <https://www-r.llnl.gov/> (Click on the Aurora logo on the right hand side of the page).



IN MEMORIAM

Judy Cunningham

Judy Cunningham died in her home in Reno, Nev. on July 17. She was 65.

Cunningham was born in Walthill, Neb. Sept. 13, 1939. She worked at the Lab from 1981 until her retirement in 1998. Her last assignment was as division secretary for the Defense Technologies Engineering Division. Her hobbies included dance, art, music and growing flowers.

She is survived by her sister, Dixie Procopio; daughter, Denise Devencenzi; son, Chris Cunningham; daughter-in-law, Shannon Cunningham; grandchildren, James Devencenzi, Sheila Conely, Nicole Paris and Kelly Cunningham; great granddaughter, Anastacia Conely; grandson-in-law, Greg Conely; and long time companion, WM Cunningham.

Services will be held today (July 22) at 1 p.m. at Callaghan Mortuary, 3833 East Ave., Livermore. A reception will follow at the Doubletree Hotel on Las Flores Road.

Newsline

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NEWS OF NOTE



Graphic display of progress for computing pioneers

By Deanna Midtaune

TID

For as long as computers have been at the Laboratory, there have been people involved in advancing the field of computer graphics. And anyone who remembers black and white two-dimensional plots printed on the RJET system knows that computer graphics have, indeed, come a long way.

In 1972, LLNL formed its first formal organization dedicated to providing computer graphics support to the Laboratory. Twelve members of the original Computer Graphics Group reunited on May 27 to share stories and see firsthand how their pioneering work has evolved.

They came from as far away as Canada to attend the two-day event, which was organized by retirees Don Vickers, Carolyn Hunt and Nancy Storch. Many had not seen each other in 30 years. Bob Lee traveled from Utah to visit with colleagues he still considers friends. "I was pleased to see how much we enjoyed talking to each other," he said. "I noticed how prosperous we all seemed and that I am not the only one who has changed during those 30 years."

Lee was hired in 1972 to form and lead the Laboratory's first Computer Graphics Group. His group combined several independent efforts to form the nucleus of computer graphics development, promotion and support at the Laboratory. Lee later replaced Sid Fernbach to become the second-ever Computation department head.

The graphics alumni recalled numerous groundbreaking accomplishments that helped solidify their existence and pave the way for the advanced visualization work that occurs at the Laboratory today. They developed the first 8-by-11-inch, high-quality, black-and-white film output on the FR80, as well as the first high-quality color film output on the world-class Dicomed Film Recorder. The group created the



John Beatty, now a professor at the University of Waterloo, and Jean Shuler, a division leader in Computation, shared an office in Bldg. 119 30 years ago.

first graphics libraries for supercomputers, the TV80LIB and its successor, GRAFLIB. They generated the first white-light integral hologram from a computer-generated movie and used the movies to showcase different phenomena, such as laser isotope separation. They also used computer graphics to help understand physics simulations.

During their visit, the alumni and family members toured the home of today's graphics group, the Terascale Simulation Facility (TSF). They heard about the latest projects and staff from group leader Becky Springmeyer and researcher Mark Duchaineau.

Now called the Information Management and Graphics Group, the team of 19 provides services that include consulting on scientific visualization packages and graphics utilities, authoring and production of videotapes and DVDs, and support for the advanced "PowerWall" display facilities, including the

state-of-the-art projectors and complex software that are needed to deliver the imagery to the large displays.

The current group collaborates with scientists from around the Lab to deliver high-end visualizations in much less time and more intricate detail than what was possible a few decades ago. Today's three-dimensional visualizations are generated from simulations that are capable of tracking billions of atoms with extreme accuracy. Comparatively, 1960s simulations were only tracking hundreds of particles.

According to Duchaineau, another important factor in the graphics evolution has been the progression of display capabilities. The giant PowerWalls now allow scientists to interactively explore the massive datasets that are generated from today's simulations. All of this is possible because computing power — the processor clock speed, memory,

amount of disk — has increased exponentially over time.

Before showing the alumni samples of recent simulations on the Laboratory's high-performance computing platforms, Duchaineau acknowledged the importance of the original group's accomplishments. "You started something here that has grown in many different directions," he said.

"We were honored to host the original graphics group," Springmeyer said. "Many of them were mentors and supervisors to senior members of the current group. They are pioneers in computer graphics, scientific visualization and computer-human interaction. We look forward to their return for a future reunion."

In a 1976 interview with *Newsline*, Lee stated, "There was no computer graphics group when I got here. The one we have now has developed into one of the outstanding groups in the nation." At least one thing has not changed.



Students SAIL through forensics

Future crime scene investigators Devyn McConachie (left) and Danielle Arnold (right) analyze an unknown powder found at a mock crime scene to identify evidence during the Lab's SAIL (Science Adventure Institute in Livermore) program.

SAIL, now in its second year, has a forensic theme and is geared for 6th- and 7th-graders interested in science and math. This year the Lab and Edward Teller Education Center partnered with the Livermore School District to conduct the sessions at East Avenue School.



NEWS YOU CAN USE



Summer Student Calendar



Seminars, panels and other activities are in full swing for summer student employees. Go to the Student Bulletin Board at <http://education.llnl.gov/sbb> for details and to register for events.

Tuesday
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ICMT seminar: "Transport Methods," by Barna Bihari, CASC. 2:30 p.m. Bldg. 219, room 163. Contact: Tiffany Ashworth, 4-3491.

NIF tour: 9:15-10:45 a.m., Bldg. 581. Contact: Laura O'Brien, 2-7295.

tion to be determined. Contact: Barry Goldman, 2-5177.

Wednesday
27

ICST seminar: "Computer Security at LLNL," by Terry Brugger, Computer Applications and Research Department. 2:30 p.m., Bldg. 219, room 163. Contact: Tiffany Ashworth, 4-3491.

Thursday
28

MARA seminar: "Counter Proliferation Analysis and Planning System (CAPS)," by Tony Farmer, Q Division, NAI. (Classified, L-cleared employees only.) Noon. The meeting loca-

DHS seminar: "Autonomous Pathogen Detection System (APDS) & Tour," by Ben Hindson, PAT Directorate, M Division. Noon-2 p.m., Bldg. 132S, room 1755. Contact: Barry Goldman, 2-5177.

HEDP seminar: "ICF," by Steve Haan, AX Division. 1:30 p.m., Bldg. 219, room 163. Contact: Vickie Stone McFadden, 2-5308.

Technical Meeting Calendar

Friday
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ASCI ITS LECTURE SERIES "How Can We Get Reliable Software from Unreliable Programmers?" by Alfred V. Aho, Columbia University. 10:30 a.m., Bldg. 453, room 1001, Armadillo Room. Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Dan Quinlan, 3-2668, or Tiffany Ashworth, 4-3491.

Monday
25

CHEMISTRY AND MATERIALS SCIENCE "CMS Postdoctoral Program Symposium," 9 a.m. - 4:30 p.m., Bldg. 155, room 1101, auditorium. The day will feature oral and poster presentations highlighting research accomplishments by the CMS postdoctoral staff. The day will end with the awarding of the annual Harold C. Graboske Jr. Postdoctoral Award for excellence in postdoctoral research in the CMS Directorate, and a best poster award of this year's symposium. Foreign nationals may attend if security plan includes Bldg. 155. Property protection area. No temporary building access for foreign nationals. Contact: Sarah Chinn, 2-5514, or Linda Jones, 3-8839.

CCMS SUMMER INSTITUTE SEMINAR SERIES

"The Espresso Density Functional Package," by Stefano Baroni, Scuola Internazionale Superiore di Studi Avanzati (SISSA). 1:30 p.m., Bldg. 219, room 163. Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Andrew Williamson, 2-8285, or Julie Burnsides, 3-1277.

Tuesday
26

ENGINEERING Seminar series: "Global Energy Security, Renewable Energy, and Roadmap to a Hydrogen Economy- Energy Security," by Gunnar Tamm, U.S. Military Academy. 1:30-2:30 p.m., Bldg. 543, room 1258. Common use facility. Foreign nationals may attend. Contact: Helen Magann, 2-5229.

CENTER FOR APPLICATIONS DEVELOPMENT & SOFTWARE ENGINEERING (CADSE) /INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH (ISCR)

"Increasing Software Quality through Automated Error Prevention (AEP)," by Adam Landis & Larry Johnsen, Parasoft Inc. 10 a.m., Bldg. 451, room 1025, White Room. For more information, see URL <http://www.llnl.gov/casc/calendar.shtml>. Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Vicki Pope (CADSE), 2-3426, or Erica Dannenberg, 3-2167.

Wednesday
27

ASCI ITS SPECIAL SEMINAR "DARPA High Productivity Computing Systems Program," by Jeremy Kepner, MIT Lincoln Laboratory. 1:30 p.m., Bldg. 453, room 1001, Armadillo Auditorium. Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Tiffany Ashworth, 4-3491.

PHYSICS & ADVANCED TECHNOLOGIES/ V DIVISION

"Characterization of a Laser-generated Plasma Using Collective Thomson Scattering and Schlieren Imaging," by J. Frank Camacho, UC Davis. 9 a.m., Trailer 2128, room 1000 (Ballroom). Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Stefanie Landes, 2-3201.

PHYSICS & ADVANCED TECHNOLOGIES/ N DIVISION

"Pleiades: LLNL's Thomson-scattering-based Tunable, High-Energy Photon Source," by David Gibson. 1:30 p.m., Bldg. 211, room 227. Property protection area. Foreign national temporary escorted building access procedures apply. Contact: David Gibson, 4-3739, or Pat Smith, 2-8210.

CCMS SUMMER INSTITUTE SEMINAR SERIES

"Time Dependent Density Functional Calculations," by Stefano Baroni, Scuola Internazionale Superiore di Studi Avanzati (SISSA). 10:30 a.m., Bldg. 219, room 163. Property protection area. Foreign national

temporary escorted building access procedures apply. Contact: Andrew Williamson, 2-8285, or Julie Burnsides, 3-1277.

Thursday
28

CENTER FOR APPLIED SCIENTIFIC COMPUTING (CASC)/INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH (ISCR)

"Open HPC: Supporting Open-Source Software in High-Performance Computing," by Rod Oldehoeft, Los Alamos National Laboratory. 2 p.m., Bldg. 453, room 1001, Armadillo Room. For more information, see URL (<http://www.llnl.gov/casc/calendar.shtml>). Property protection area. Foreign national temporary escorted building access procedures apply. Contact: Dan Quinlan (CASC), 3-2668, or Erica Dannenberg, 3-2167.

Friday
29

CMS ASSOCIATE DIRECTOR FRONTIERS IN CHEMISTRY AND MATERIALS SCIENCE SERIES

"Academic and National Security Research at the Lujan Neutron Scattering Center at LANSCE," by Alan J. Hurd, director, Lujan Neutron Scattering Center at LANSCE, Los Alamos National Laboratory. 3:30 p.m., Bldg. 155, auditorium. Contacts: Mike Fluss, 3-6665, or Dawn Brosnan, 4-5008.

ELECTRONICS ENGINEERING TECHNOLOGIES DIVISION (EETD)

"Treatment of Uncertainties in Engineering Mechanics," by Phaeton Koutsourelakis. 10 - 11 a.m., Bldg. 141, room 1104, Nyquist Room. Common use facility. Foreign nationals may attend. Contact: Lee Glascoe, 3-2922.

The deadline for the next Technical Meeting Calendar is noon Wednesday.

Please submit your meetings via the new Technical Meeting Calendar form on the Web, located at <http://www.llnl.gov/tmc/index.html> For information on electronic mail or the newsgroup llnl.meeting, contact the registrar at registrar@llnl.gov.

AROUND THE LAB



DDLS

Continued from page 1

Smith said it took a long time for well established research to have an impact on policy.

The electoral cycle that drives politics doesn't lend itself to the sustained attention and action issues that climate change, proliferation of weapons of mass destruction and terrorism require, Smith observed. In politics "the adrenalin flow is high and attention span is limited" with politicians tending to address "one crisis at a time," he said. "Politicians would much rather poll than lead. They are much more inclined to follow polls and where they think public opinion is going than to provide leadership.

For politicians research in such global areas as climate change, the environment, nuclear proliferation and terrorism "are there at some level of consciousness, but not at the level we would like to see of needing to take action.

"To have an impact on the policy process, you have to understand how it works," Smith said, adding it's necessary to map the policy process, understanding who makes the decisions and who influences the decision makers.

"Engaging the public is also important to put pressure on governments to act," he added.

Over the years, the International Development Research Centre (IDRC), of which Smith is the chair, has found no "single bullet" or clearly defined "best practices" for influencing policy, but rather "many factors that interact in very complex ways," Smith said.

However, he did say that "relationships are critical," noting that "personal and professional



BOB HIRSCHFELD/NEWSLINE

Ambassador Gordon Smith (right) chats with Clint Abbott of Canada's Centre for Global Studies and Ben Santer, of LLNL's Program for Climate Model Diagnosis and Intercomparison.

links among individual researchers and decision makers are decisive in influencing policy."

Another factor the IDRC has found to influence decision making is a clear understanding on the part of policymakers of the scientific and/or technical issues.

"We're dealing with a world that is increasingly complex that's caused by globalization. We have to manage our increasing interconnectedness," Smith said. But there's an absence of "international governance" for addressing such global "pandemics" such as climate change, avian flu and water shortages.

Over the last 30-40 years the lines between foreign and domestic policy have "become blurred," Smith said. "Basically what that has done is break down silos, and governments operate in silos. The reality is that silos must be broken down to address global issues."

However, as a consequence of this, governments have to recognize the limits of what they can do, he said. "The question is then, 'what does

one do globally?'"

While there are "a panoply" of international organizations "as they are now constituted, they are not up to the task" of addressing these problems, according to Smith. Ad hoc "coalitions of the willing" are inadequate to address global problems."

Smith called for "renewed U.S. leadership" in building the international governance necessary to "build a safer, more prosperous world." Transnational organized crime has spread globally faster than countries have been able to mobilize against it largely because of the absence of strong international governance, he said.

Similarly, with climate change "I see no sign that there is a serious examination of the problem being done at the global level," Smith said, adding that even had it been signed by all countries, the

Kyoto Protocol is inadequate to address the issue.

In concluding his talk, Smith offered some recommendations for improving the way research is brought into the policymaking process. "Researchers need to play a leadership role," Smith said.

"Research must be disseminated in the proper form — simple and easy to read for the non-expert," he said. "There needs to be interaction between researchers and policymakers before research is undertaken."

Smith said that "public dissemination and debate on research is important."

In an era of competing special interests, it is also necessary "to strengthen the capacity of organizations to get independent policy advice," Smith said.

Smith's presentation will be rebroadcast on Lab TV channel 2 at 10 a.m., noon and 2,4, and 8 p.m. Thursday, July 28, and 4 a.m. Friday, July 29.



JACQUELINE MCBRIDE/NEWSLINE

First Teller scholars put skills to work in Biosciences

Entering sophomore year in the fall, Lauren Tracy (left) of UC Berkeley and Nicole Sadler (right) of UC Davis examine a gene chip in the Lab's Microarray Center (LMAC). Tracy, a Livermore High graduate now studying biochemistry and Sadler, a Granada High graduate now majoring in genetics, are the first recipients of the Edward Teller Science Scholars Award, which they received last year for outstanding achievement in science. The scholarship, instituted last year in honor of Teller, also includes an internship at LLNL, which both students are completing this summer in the Biosciences Directorate.



CLASSIFIED ADS

See complete classified ad listings at
<https://www.ais.llnl.gov/newsline/ads/>

AUTOMOBILES

1989 - Honda DX Accord, one owner, very good condition, 124,600 miles, stick, radio, cassette, power steering, cruise control, \$1800 925-447-4875

1994 - Jeep GrandCherokee, AWD, ABS,CD, 4L,PW, 163k miles. rblt trans, excellent appearance. \$4500 925-837-4097

1984 - XJS Jaguar, exc. cond. very reliable, new CD, trans, A/C, PS. 100k miles. \$ 6,000.00 or OBO 650-678-8873

2002 - Jeep Gr Cherokee Ltd, V8,AC, pwr,10-CD changer,leather,sunrf,45Kmi. Excel cond. Bonus: bmpr2bmpr warr incl. Pay \$0 for covered repairs til 08! 209-833-1201

1998 - Chevy Z71 Teal Colored 4x4 Extended Cab Truck,117k Mi.,Fully Loaded,Great Condition,\$10,000.00 925-516-8925

2000 - Pontiac Grand Prix, Automatic, V6 motor, 4 door,all power options, 90k miles, great shape, great ride \$5000. Ask for Steve. 209-835-1598

1993 - Silhouette minivan, ocean blue w/ gray interior, V6/3.8l, tow pkg,Yakima 4-bike roof rack. Very good condition, with dented front bumper. \$2095. 925-454-5305

1994 - Hyundai Excel, 4dr, Auto, AC. Runs good, great commuter vehicle, 140k miles. \$1500.00 209-815-6962

2002 - Saturn L300 excellent condition inside and out, 43,000 miles, services maintained, new tires \$9,750 o.b.o 209-835-8205

1994 - Honda Civic EX 5-speed w/extras. 177k miles. Runs good but needs some work. \$1,995 or BO. 209-329-3900

1965 - 289 Mustang. Black/black. Good inside & out. \$8500. 1965 Mercury Caliente and donor car. New paint, interior. \$5000 209-346-0494

AUTOMOBILE ACCESSORIES

Delphi XM Roady2 satellite radio car system. \$38 or best offer. 925-373-9276

1:24 scale die cast stock car, limited edition, Elliott Sadler no. 38 M&M Yates Race Team. Collector item. Paid \$75. New in unopened box. \$25. 925-648-0671

Yakima roof rack system, including crossbars, towers, locks, fairing, and 2 Steelhead bike mounts. Excellent condition. \$150. 925-455-6420

Tonneau Fits Chevy Full Size P/U Long Bed (C/K 1988-1999)\$200 OBO 925-371-1705

B18-A Engine from 1990 Acura Integra. Ran when removed. \$100 OBO 209-346-0494

BICYCLES

20-inch girls bike - \$25. 12-inch Barbie bike - \$25. Both in excellent condition. 925-960-1540

12 speed, Exeter 400 Shimano components, needs lots of TLC \$40 obo 925-292-9414

BOATS

35HP electric start outboard Evinrude with propeller, shift and throttle cables, key and gas can. 766-8233. \$350 takes all. 925-516-2570

19ft Chriscraft, I/O,V8EFI, tower, bimini top,CD,tandem trailer,lots of toys, \$11K 510-538-7444

1990 24ft Donzi. 454 fuel injected, GPS/chart, depthfinder, DVD, 6 speaker sound, 4 place intercom/4

headsets, sleeps 2, 2axile trailer \$18,000 209-401-4874

CAMERAS

New palmsize hi-res videocamera/digital camera/MP3 player. Record DVD quality video on SD memorycard. Playback on TV/computer, sacrifice for \$289. 415-543-3643

Minolta 7000 35mm, with 50mm lens. Extra lenses- 70 to 210mm & 28mm. Flash, case, bag and more. \$250. 925-634-2701

Sigma 28-200 zoom lens, up to 4x, Nikon mount, \$110. 925-377-6537

ELECTRONIC EQUIPMENT

Mitsubishi 35-inch tube TV console with walnut cabinet, picture-in-picture, cable-ready tuner, top-of-the-line unit, fantastic picture. \$175 415-543-3643

Electrostorm disc, 8 inch electro plasma panel, pulsate light to touch & sound, table stand or wall mount & UL/CUL adapter. Paid \$25. New. \$15. 925-648-0671

Sony CRX100E Internal CD RW 24X4X2X IDE, comes with Nero Burning ROM, \$10 925-447-7406

Sound masking white noise generator. portable home unit lencore. new, masks outside noise. \$125 obo (\$250 new) 925-980-9336

Speakers-Pioneer large floor standing model. \$75.00 for the pair. Call 2-0875 or 925-447-2068

GIVEAWAY

Old Cameras/Projector - FREE! Nikon FG 35mm camera. Sony 8mm Handycam video. Kodak 850H 35mm projector. All need repairs. 925-449-4003

10-ft x 36-inch above ground pool. Includes filter, cover and solar cover. Easy set-up. Inflate the top ring and then add water. 925-960-1540

Dishwasher. Old but works fine. 209-833-1201

Gateway laptop from 2000 with 15inch display which occasionally boots Windows ME, external cd writer with burning software, external zip drive 510-912-6823

Three rooms of carpeting in good condition. Gray/blue color. Removed for wood floors underneath. You haul from Livermore. 925-449-6048

HOUSEHOLD

Sturdy, white sofabed in great cond. Its a sofa in the day and a bed for the night. Great for college or guest room. You add the futon. \$35 925-516-2570

Snugli: Over the shoulder comfort model. Clean. \$15.00. 925-249-1786

Anti gravity massage chair. Purchased from Costo, hardly used like new. \$85 obo, leave message. 209-835-9240

Maytag refrigerator 18.5 cu. feet with ice maker. 5 yrs old. Excellent condition. \$200 925-960-9812

GARAGE SALE. Saturday July 23 at 8am. Household items. 3806 Hillside Ave, Livermore 925-443-8580

La-Z-Boy recliner sofa with fold down center backrest with cup holders. Good condition. \$95 or best offer. 925-373-9276

Iron bed frame. California King size. Complete, like new. Ashley Millenium Bittersweet style -can send pic. \$450 new, asking \$150. 925-784-6682

Noritake 5930 China service for 8, white w/ gold edge, probably 50-60 years old, w/ hostess set,

looks like new, \$200 925-456-6725

Wok set by Chefmate. Includes 10 pieces; 14 inch wok, dome lid, spatula, chopsticks, stir fry rack and tongs. Paid \$25. New in unopened box. \$15. 925-648-0671

Small upright freezer 3 years old. No room for it anymore! \$50/obo. Need to pick it up. Livermore location. 925-245-9165

Entertainment center. Size (inches) 49Wx53Hx16D; TV well 26Wx20H; golden oak finish. Digiphoto available. \$120. 408-772-4118

Canning jars, various sizes. \$10.00. If interested, will bring to work. 510-582-2938

Sofabed(Q) and Recliner loveseat. La-Z-Boy plush dk Blue. Good cond. \$500 set. 209-833-1201

Kenmore Elite Xtra Capacity-Heavy Duty Washer and electric Dryer. Dark Brown/Black. Top Load, one year old. A Steal @ \$500 510-483-3525

Bedroom set, master bedroom wht pine southwest, king hd/ft board, 2 dresser, 2 night stand, 3 lamps, like new. \$395 925-980-9336

Beautiful golden/brown couch and love seat. Excellent condition, barely used good quality furniture. Must sell. Will take best offer. 209-221-7876

Graco playpen with carrying case. Good condition primary colors. \$25. 209-329-3900

Remodeling Sale: Solid oak kitchen cabinets. Must see. Make offer. 925-634-2362

Moving Sale, Futon Queen size, Wood crashpad + 9 inches firm futon, excellent condition, asking \$350.00 /obo. Call after 7 pm 925-337-2598

Bookcases (two): one solid oak, other oak veneer. 78in H x 48in W x 12in D, 6 shelves. \$150 each. 925-960-9559

LOST & FOUND

BMX style Redline bike removed from the B132S Loading dock area. Please return the bike, it is NOT lab property. 209-933-9570

MISCELLANEOUS

Girls summer clothes, size range from newborn to 3T. Each piece either \$1, \$2 or \$3. Livermore 925-292-9414

Band saw for sale. Older Craftsman Model. 18 inch, 1.5 horsepower, 2-speed, 12 inch depth. Newer motor, tires, bearings, etc. \$500.00 209-836-9035

Display case \$75/obo, Enclosed trailer \$200, Pinball machine \$50 (needs work), Soda machine \$50. 925-550-3809

Baby stroller, infant carrier and base, Evenflo Oshkosh denim with animal print good condition 3 years new. \$85, leave message. 209-835-9240

SF 49er tixs: Most games are available. Upper Reserved, Section 38, Row 10, Seats 1&2 \$64/per seat 209-599-9942

Inflatable boat, 60 inches x 40 inches, molded oar locks, rope holders, for ages 6 and up. Great for the pool. Brand new in unopened box. \$10 925-648-0671

Industrial Minor Saw, good for detail. Hardly used. Excellent quality. If interested, will bring to work, 50.00 OBO 510-582-2938

From Russia with Love, special edition DVD. Bond at his best, \$5 209-836-3481

49er pre-season tickets: 8/13 7pm vs Raiders and 8/26 7p vs Titans. 2 tix per game, upper box, row 4.

Great seats; face value \$64 ea. 925-447-6784

M&M COLLECTIBLES. Rare, extensive collection of twenty different M&M brand items. Photos available. \$50. From an adult household, no children. 925-634-1110

Scrapbook supplies. 25% off retail. Call for description of items available. 209-329-3900

Tractor: Yanmar YM1500D 4wd 19hp Diesel 3pt hitch PTO with Tiller, Box Scraper, Rear Scoop. Great for small property, or landscaper. \$4000.00 OBO 925-449-8009

Garden bench. Wrought iron frame w/wood slats. About 6 feet long. Free to good home. 925-447-7872

MOTORCYCLES

1999 - Harley Springer Softail. 10K miles. Lots of upgrades and extras. Warranty until 11/05. Excellent condition. \$14,995.00. Pictures available. 209-869-4884

1996 - Yamaha YZ 125 dirt bike. Pro Circuit pipe, Pro Taper bars, Green Sticker, Powder coat frame, RUNS GREAT. \$1,900 or BO 209-832-8723

2001 - Honda ST1100 (non-ABS), one-owner, 31K miles, excellent condition, new tires, ~50MPG, many extras, \$7000/OBO. 209-836-5413

1999 - XR80 \$900. Modesto area or I can bring it in to check it out. 209-529-1961

MUSIC INSTRUMENTS

Betsy Ross spinet piano by Lester of Philadelphia. Needs refinishing & tuning. Make offer. 925-634-2362

PETS & SUPPLIES

AKC Registered Chocolate & Black Lab puppies. \$500 Female, \$400 Male Available 8/22. Raised around children. 209-388-1811

Flashy Boxer puppies, avail. 7/22 Fawn color.White markings, black mask, M&F 1st.shot & tails. \$450.00 209-606-8703 209-847-6534

Cats 1male(1yr) & 1female(3yr). Need loving home, up on shots, fixed, great with kids. Well manered indoor cats only. Moving. 925-777-9472

RECREATION EQUIPMENT

1995 Jayco motor home, designer series, class C, 28ft. 31,000 miles \$32,000 Ford E-350 925-447-5015

Exercise Equipment. Purchase my Voit stair stepper for \$45 and get a Health Rider included free. Both in very good condition. 925-606-0260

Poker set, cherry finish wood holder with 4 different color chips (240 total) and 2 decks of cards. Paid \$40. Great gift. New in unopened box. \$25. 925-648-0671

1931 Model A Sports Coupe. All parts included to restore. Rumble seat. \$5,000 or BO. 209-329-3900

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>.

Oakland/Montclair - Vanpool has openings. Conventional (5/40) schedule: leave Oakland/Montclair 7:30 a.m.; leave LLNL 5:00 p.m. 510-530-1289, ext. 2-9831

SERVICES

INTERIOR, EXTERIOR PAINTING, free estimates. Excellent workmanship, 25 yrs exp. References. 510-537-7222

Excellent and affordable DAY CARE, ages infant up to 4 years old. Close to Lab. 925-454-0410

SHARED HOUSING

Livermore - 1 room for rent. \$500 a month plus a \$500 deposit. Shared bathroom, kitchen, livingroom. Please call for more info. 925-922-2393

Livermore - Furnished room near LLNL, no smoking, pets, guns or stereo, \$450 month plus deposit and share utilities 925-455-6044

TRUCKS & TRAILERS

1993 - 27 ft Prowler travel trailer, self-contained, ex condition, AC, Micro, new roof, 25 ft awning, frt kitchen, hitch, Blue Book value \$4750. 408-272-4612

3 motorcycle trailer, 15 inch wheel, ramp mount area custom ramp. Asking \$800 or better. Appx. W(85in.), H(23in.), L(144in.). 925-454-0467

1972 - Chevy C10 truck,built for show,rebuilt transmission,full audio/video,air suspension,new carpet/dash,\$7500 925-462-4022

1996 - Ford Ranger XLT, extra cab, good running, bedliner,long bed, security system, cassette. Nice little work truck 5,250.00 OBO 510-537-7222

2002 - Chev Silverado 1500 xcab. V8 5.3L,AC,pwr,CD,sprayed bedliner. 60Kmi. Excel cond. \$15K. 209-833-1201

1982 - Older tent trailer located in Byron. Sleeps six. (Moving) Make offer 925-634-2362

1995 - JEEP GRAND CHEROKEE LAREDO 4X4 \$5000 6-Cyl. 4.0 Liter, Automatic. AC, PS, PW, Cruise, Power Locks, Multi CD, Roof Rack, Alloy Wheels Runs great. 510-332-8054

VACATION RENTALS

Arnold cabin, Highway 4 High Sierras, 4 bedrooms, 3 bathrooms, many amenities, hot tub. 209-478-0340

Cold Springs, CA. - Sleeps 8-10. 5 min to Pinecrest Lake, 20 min to Bardsley Reservoir, 30 min to Black Oak Indian Casino. Hiking, boating, fishing, biking! 925-240-1206

SOUTH LAKE TAHOE - 3 Bedroom 2 Bath Chalet, nicely furnished, quiet area, park with Lake, tennis, etc., Great for family vacation. RESERVE NOW! 209-599-4644

MAUI - 1 year house exchange. Perfect opportunity to see what it is like to live in paradise for longer than a short vacation. 925-449-4003

WANTED

Wanted, womens 3 speed bicycle, size 24 or 26 inch 925-443-5549

Looking for child care and or tutoring for 13 yr old daughter in independent study program. 925-785-3589

Looking for someone in the Livermore/Tracy area with land that I could use to shoot on and/or maybe hunt on. PLEASE CALL. 209-832-8723

Computer restore CD for E machine model i 500 or phone help 925-735-6002

We are looking for a small condo or small studio to rent in Honolulu for 2. Low rate for Dec. 24 to Jan 14. Dates are open. 510-537-7222

Kayaks and accessories 925-443-5549

Need help moving an Oak Armoire from Tracy to San Jose. I do not have a truck and would reimburse for gas. 209-221-7876

Verizon Wireless phone. Any working model. 209-329-3900

TRUCKS

Continued from page 1

the near future.

In recent weeks, the U.S. Army has allocated \$2 million and DARPA \$1.5 million to permit the production of gun box armor kits for 80 more trucks.

House Armed Services Committee Chairman and Rep. Duncan Hunter asked the Laboratory to develop modern gun truck armor kits.

At an event demonstrating the armor kits Thursday, Hunter said the iron horse truck was built with armor kits developed by researchers at the LLNL, which has "great talented folks."

"This truck was hit by a major improvised explosive device (IED). A huge blast," Hunter said. "The driver sent back a message, 'All seven are breathing today,' and sends his thanks."

"We wanted to address the main threats of hidden bombs or IEDs, sometimes followed by ambushes," said Milt Finger, former head of Department of Defense programs at LLNL, who oversaw the program for the Lab. "We have sought to protect the truck occupants from the initial blast and give them stronger convoy protection."

The gun truck kits have proven popular and helpful to American soldiers in Iraq — so much so, that one transportation battalion (which has received most of the gun truck kits) has given LLNL a commendation "for exceptional service."

Each gun truck kit, which consists of readily available and low-cost armor steel and ballistic fiberglass panels, provides a wall of protection around the back of the truck and for the truck cab. Each side wall is topped by two-foot by two-foot sections of transparent armor to pro-

tect machine gun operators. (Gun trucks usually carry two to four machine guns).

Gun trucks offer several advantages over other vehicles. They can carry more armor because they are heavy vehicles; the truck's elevation provides good vision and better protection from IED threats; and the vehicles have multiple guns in the event one gun jams or the truck is attacked from multiple directions, Finger said.

Finger sees a number of other benefits provided by the Livermore gun truck kits. In addition to having a simple design and ample ballistic protection, the kits are relatively inexpensive (\$40,000), can be assembled by a team within five hours and are easy to repair.

"Everyone on the LLNL team felt privileged to be able to have an impact in protecting our troops overseas. We all felt the gun trucks would be very useful and be well-received by the soldiers," Finger added.

"We pushed hard to provide a rapid response to this need that was identified to us by the military and government officials," Finger said.

After the need was identified, a team of Lab researchers started meeting at once, settled on plans for building gun trucks in January 2004 and started design work in February.

The first prototype gun truck, built by the shops of the Lab's Manufacturing and Materials Engineering Division, was completed in March 2004 and sent to the U.S. Army Developmental Test Command's (DTC) Aberdeen Test Center at Aberdeen Proving Ground in Maryland for ballistics and safety testing.

Working double shifts to quickly gather and analyze test data, DTC provided advice on armor performance, along with safety fixes and recommendations on design improvements.

The prototype truck was shipped to Iraq in July 2004

to a transportation battalion at Camp Anaconda in Balad, north of Baghdad. The truck proved popular with the soldiers and was used on daily missions.

Later, the military requested 30 more gun truck kits and those kits were shipped to Iraq, arriving in December 2004. Lab teams have twice visited Iraq to provide instructions on assembly procedures and to receive additional first-hand feedback.

After LLNL built the first prototype truck, the technology was transferred to U.S. companies for production. The project's main contractor was Plate Fabrication and Machining of Philadelphia, Pa. and two other firms — Waco Composites of Waco, Texas and Protective Armored Systems of Lenoxdale, Mass. — have been key participants.

In addition to Finger, LLNL researchers on the team are Steve DeTeresa, project leader for the truck kit, mechanical technician Walter Grundler, and machinist Mike Thiry. Other team members from outside the Laboratory are Vietnam-era gun truck veterans Larry Fiantt and James Lyles, and engineer Phil Sluder.

Gun trucks were used during the Vietnam War. In developing the new gun truck kits, the LLNL researchers used information from the Vietnam-era gun truck veterans and designed upgrades to reflect the differences in the Iraq war.

"The multidisciplinary nature of the Laboratory allowed us to respond quickly to Rep. Hunter's request and to do so successfully," DeTeresa said. "The troops have really loved these armor kits. They have gotten all kinds of accolades."

The Lab employee also credited the staff of the Aberdeen Test Center and the Tank and Automotive Command with providing "excellent support and feedback" toward making the gun trucks.

FIRE

Continued from page 1

7,000 acres were affected.

The grassfire, named "the Tesla fire" because of its point of origin, broke out early Tuesday evening. By midnight, no flames were visible on Site 300 property. The fire was declared completely contained Wednesday morning.

The Laboratory declared an operational emergency late Tuesday afternoon, when the Lab's fire department was asked to provide mutual aid to other agencies fight-

ing the fast-moving blaze.

Lab fire chief Randy Bradley said, "We have recently completed a series of controlled burns to eliminate dangerous dry grassy areas and provide buffer zones around our structures here. At no time were any critical facilities threatened, nor was there any danger that any hazardous materials could be released."

He added, "I want to emphasize that this was a typical grass fire, many miles away from the main Laboratory. Our fire station at Site 300 is always staffed for fires like this, and was well prepared to respond."

Site 300 personnel were asked to remain off-site Wednesday to allow emergency crews access to the area.

The site was operational Thursday morning, and employees returned to work.

The fire began just west of the site between 4 and 5 p.m. Tuesday. Winds carried the fire onto Lab property, and then pushed it eastward and off-site by midnight.

Firefighters are investigating the cause of the fire.

More than 650 firefighters from the Laboratory, California Department of Forestry, Livermore-Pleasanton, Alameda County, Tracy and San Joaquin County worked through the night to fight the fire. Alameda County Fire served as incident command out of the Lab's Site 300 fire station.

IM

Continued from page 1

This year will most likely see the processing of more than 8,000 reviews, which would be about a 20 percent increase.

While the old system might have taken days, weeks, sometimes even months, depending on document content, and with no means for tracking a document's progress along the way, the new system promises to complete the review in three days and assigns a tracking number at the onset to help authors track the document's status.

And, there's more good news. Review expenses have dropped. The previous manual process could cost from \$185 to \$340 per document. The new system's average cost per document is \$76.25. This is due in part to the shift of more responsibility and control for document review onto the author and trained directorate reviewers.

Why is IM important? The National Nuclear Security Administration (NNSA)/Department of Energy (DOE) and UC Contract 48 mandate that the Lab have an information management process. In addition, Lab policy requires that information produced under Lab auspices receive reviews for classification, export control, sensitive subject and intellectual property considerations before being released off-site or presented to an external audience.

Nicole Rantz, group leader for Information Management and one of the system's originators, is very pleased with the progress of the system.

"The goal at the onset was to develop a Web-based method that would be easy to use, and reduce the time it takes to complete reviews. We have achieved our goal. Since the online system began, I have heard few complaints from users. This is a good sign," Rantz said. "We

want to thank the directorate points of contact and the users for their part in making it so successful."

Rantz attributes part of the system's success to the initial collaboration of a Lab-wide team representing the Office of Classification and Export Control, Industrial Partnerships and Commercialization, Operations Security (OPSEC), Business Services's AIS programming team and the TID Library. These representatives came together to help mold the system at its early design stages and today continue to provide institutional reviews and support where needed.

Pam Poco, associate program leader for Information Security, likes the IM system because it fits so well with the concepts of Integrated Safeguards and Security Management (ISSM). This is because IM allows directorates to take responsibility for performing the appropriate reviews and ensuring that the information that needs to be protected is protected, yet allowing information that needs to be shared gets shared. Another aspect she likes is that there is an assessment process using subject matter experts to make sure documents are being properly reviewed by the directorates.

Directorates that have become frequent users of the system include: Physics and Advanced Technologies; Chemistry and Materials Science; Energy & Environment; and Computation. According to Al Moser, CMS facilities director and chief financial officer, "The IM system has proven to be a cheaper, better, faster way to review and release documents."

Now that the customers are satisfied, what's next for Information Management?

Rantz states that while emphasis thus far has been on getting the system off the ground, it's now time to evaluate the challenges ahead.

"One goal is to develop online training for Lab authors and administrators and train directly in the directorates to increase attendance," Rantz said.

IM: A few reminders

- If you have produced a document in any medium — paper, videotape, audiocassette, compact disk, film, microform or Web page — for external use, it needs to go through the Lab's review and release process.
- Go to <http://im.llnl.gov> to access the IM system for review of unclassified documents. Supporting documents and links to directorate specific IM pages are available here.
- If you are a new user or need help or have questions, call 2-IM4U (2-4648) or e-mail: im-help@llnl.gov.
- Authors of source code and classified documents should use the Document Release Form (LL6397 - Informed Filler) for the review of their documents and refer to the IM Group Website for additional instructions.

Along the way, Rantz hears praise for the system, even beyond the Lab. At DOE conferences she attends, she is often asked about the new process. "The kudos are great, but the real praise and thanks should go to the users. It's because of Lab authors that the system is successful."

Birding 101: winging it in the Bay Area

Have you ever wandered over to the Central Cafeteria for some midday refueling and wondered, “What was that interesting looking bird wading along the banks of the basin?”

Or perhaps you have been hard at work in your office when the high-pitched song of a visiting passerine left you hopelessly distracted, asking “What kind of bird is that and when is it going to stop singing?” Well, satisfy your curiosity and take a virtual birding excursion around the basin for Birding 101: Avian Identification.

Our journey begins along the basin’s southern banks on a cool and misty December morning when we spy a large, graceful predator slowly wading through the shallows. His pace is purposeful, taking one step every 3-5 seconds so as not to alert anyone of his presence.

Suddenly, in a blink of an eye, he thrusts his spear-like bill into the cold water and captures the first course of his fish breakfast. After quickly consuming his tasty prey, this avian visitor realizes he is being watched and with long, slow wing beats he uses his six-foot wingspan to lift himself from a productive fishing hole and casually glide to the next one.

After noting this bird’s foraging behavior, flight pattern, and size, we determine that it’s some type of heron (Family *Ardeidae*). Now we must use our field guides and visual acuity to identify the species. As we stealthily watch the heron, the puzzle pieces slowly fall into place.

One person calls out, “I see a white face, and dagger-like yellow bill with a black tip; he also has a broad, black eyestripe that extends off the head.” Another person adds, “His body is primarily a blue-gray color; he’s got a black shoulder patch and long yellow legs.” Congratulations. You have just successfully identified your first Great Blue Heron (*Ardea herodias*), a sporadic visitor to LLNL.

Our birding journey continues along the basin’s west bank during a mild, sunny February afternoon



By Brian Spirou



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MICHAEL G. VAN HATTEM



JIM WOOLLETT



Top left: Black Phoebe (*Sayornis nigricans*), on a sally perch. Center left: The Pied-billed Grebe (*Podilymbus podiceps*) is a common visitor to the basin and an open water specialist. Pied-billed Grebes are strong swimmers and pursue prey by diving to catch aquatic invertebrates and small vertebrates. Lower left: The Green Heron (*Butorides virescens*) is a small wading bird that specializes in slow stocking off prey within the shallow water margins of the basin. Green Herons prey upon fish and aquatic invertebrates. Above: The Snowy Egret (*Egretta thula*) is a showy wading bird, that similar to its relatives pursues prey within the shallow margins of the basin. Egrets tend to be easily disturbed, so the best time to see one is either early in the morning or in the evening when the basin is calmer and the area has less foot traffic.

when a broken series of “tee-hee, tee-hoo’s” are heard that peak at a high note and then drop in the second phrase. Curious about what is making this sound, we patiently scan the shoreline and eventually notice a small bird sitting atop an exposed branch. The bird

swoops off its perch and embarks on a quick, circular flight path over the water and then perches again. Someone announces, “It’s a flycatcher (Family *Tyrannidae*) hunting for insects.” Yet, there are 36 flycatchers in the west, which one is it?

We notice that she is about six inches in size and, while perched, she bobs her tail. Black plumage covers her entire back and a slight tuft on her head. When she turns, her white belly and tail feathers are revealed — it’s a Black Phoebe (*Sayornis nigricans*).

Despite this quick journey, avian identification is less daunting now. First, we simply make behavioral observations: foraging behavior, flight pattern, song, and unique characteristics like the Black Phoebe’s tail bob.

When combined with observations of broad physical characteristics (e.g., size, shape), these serve to identify the family or subfamily for this bird, thus simplifying the avian identification process. Detailed physical characteristics (e.g., plumage coloration, beak shape) and other helpful considerations such as preferred habitat (is the bird typically seen in a woodland, marshland, etc.?) and residency status (When can one expect to see a certain bird in this part of California? Is it a migrant species?) then can be used to identify the species.

The next time you need a break, why not head over to the basin for a birding identification excursion. Or why not load up the family and share your newly acquired birding skills at one of the great parks listed below? Don’t forget your binoculars (offsite only), field guide (try *National Geographic’s* Field Guide to the Birds of North America), notebook and camera. Birding is a great way to spend a day together. And it gets kids fired up about science.

Want more bird identification information? Check out Cornell University’s Website (<http://www.birds.cornell.edu/programs/AllAboutBirds/BirdGuide/>) or contact summer intern Brian Spirou at spirou2@llnl.gov.

Great parks for birding

- Sycamore Grove Park (Livermore)
- Berkeley Aquatic Park (Berkeley)
- Coyote Hills Regional Park (Fremont)
- Don Edwards National Wildlife Refuge (Fremont)
- Tilden Park and Wildcat Canyon (Berkeley)
- Henry Coe State Park (Morgan Hill)
- Martin Luther King Jr. Regional Shoreline (Oakland)
- Big Basin State Park (San Mateo County)
- Golden Gate National Recreation Area (Sausalito)
- Point Reyes National Seashore (Marin)

Look for these other birds in, around the basin

Bufflehead (*Bucephala albeola*)
Pied-billed Grebe (*Podilymbus podiceps*)
Lesser Scaup (*Aythya affinis*)
Ruddy Duck (*Oxyura jamaicensis*)
American Coot (*Fulica americana*)

Killdeer (*Charadrius vociferus*)
Greater Yellowlegs (*Tringa melanoleuca*)
Green Heron (*Butorides virescens*)
Great Egret (*Ardea alba*)
Cattle Egret (*Bubulcus ibis*)

CONTRACT

Continued from page 1

officials indicated that the LLNL contract could be extended for as long as four years.

On Tuesday, a team comprised of UC, Bechtel National, BWX Technologies, Inc., (BWXT) and Washington Group International (WGI) formally submitted its bid to manage LANL to the National Nuclear Security Administration (NNSA). The UC-Bechtel team is led by Laboratory Director Michael Anastasio, who will become LANL director if the bid is successful, and includes a consortium of New Mexico higher education institutions.

Also submitting LANL management proposals Tuesday were teams composed of Lockheed Martin and the University of Texas, and Nuclear Watch New Mexico and Livermore’s Tri-Valley

CAREs (Communities Against a Radioactive Environment).

In 2003, Congress directed the DOE to conduct a competition for management of any laboratory contract that had been in place for 50 years or more without competition. Five national laboratory contracts, including LLNL and LANL — which have been managed by UC since their founding more than 50 years ago — were affected by this action.

On May 19, NNSA released the final request for proposals for the LANL contract, and on May 26, the UC Regents voted to compete to continue managing LANL. According to DOE, a source evaluation board made up of DOE technical and business experts will review the proposals and provide recommendations to NNSA’s Source Selection Official. A decision on the LANL contract is expected before the end of this year.



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